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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/825,359

04/16/2004

Peter Gibson

COCH-0009-UT1

8104

30678

7590

10/09/2007

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EXAMINER

HOLMES, REX R

ART UNIT

PAPER NUMBER

3762

MAIL DATE

DELIVERY MODE

10/09/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/825,359

Applicant(s)

GIBSON, PETER

Examiner

Rex Holmes

Art Unit

3762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,4-9,12,20-24,27,28,30,31 and 89-116 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-9,12,20-24,27,28,30,31 and 89-116 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments with respect to claims 1, 2, 4-12, 14, 20-24, 27-39 and 51-56 have been considered but are moot in view of the new ground(s) of rejection.

***Specification***

2. The substitute specification filed 7/2/07 has been entered.

***Drawings***

3. The drawings were received on 7/2/07. These drawings are acceptable.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 114-116 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Claims 114-116 are rejected, as they are dependent from a non-existent claim. It is suggested to cancel the claims or re-write them so that they are dependent from an existing claim.

***Claim Rejections - 35 USC § 102/103***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

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applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-2, 4, 7-9, 14, 20, 24, 27-28, 30-31, 89-93, 98-100, 104-110 are rejected under 35 U.S.C. 102(b) as being anticipated by Berrang et al. (U.S. Pub. 2002/0019669 hereinafter "Berrang") or, in the alternative, under 35 U.S.C. 103(a) as obvious over Berrang.

10. Berrang discloses a hearing aid/cochlear apparatus that comprises a housing adapted to abut the patients bone (Figure 6). Berrang further discloses that the housing can be made out of ceramic (¶¶ 23, 25), and includes components located within the housing (2), and an osseointegrating protuberance that extends from the housing into the bone (¶ 22). Berrang further discloses that the device is a tissue-stimulating device (Figs. 1-6; ¶ 77).

11. Berrang discloses that the implantable device is configured, to be secured to the mastoid portion of the temporal bone in the tissue surrounding the skull (Fig. 3-6). Berrang further discloses that the fixation device is a threaded screw and is capable of being removed after osseointegration (¶ 22).

12. Regarding claim 106, Berrang further discloses that the housing is coated with a medical grade silicone (¶ 69).

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13. Regarding claims 108-110, Examiner notes the limitation "configured to be placed in direct contact with but not within the bone and further configured to gradually sink into the bone during osseointegration of said protuberance", is only functional language and only requires the capability to so perform. Here the titanium screws are capable of being positioned adjacent the bone and are further capable of sinking into the bone during osseointegration.

14. In the alternative, Berrang discloses that it has a housing made out of ceramic and protuberances made out of titanium, but Berrang fails to disclose that ceramic is non-osseointegrating and titanium is osseointegrating. However, the Applicant's specification discloses that ceramic is a non-osseointegrating material and that titanium is a osseointegrating material (Applicants Spec. ¶35). Further, it would have been obvious to one having ordinary skill in the art at the time the invention was made, as it was known in the art that titanium promotes bone growth and ceramics do not promote bone growth.

15. Claims 5-6, 21-23, 94-96, 101-103 and 112-113 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berrang as applied to claims 1, 93 and 98 above, and further in view of Håkansson (U.S. Pat. 6,840,919).

16. Regarding claims 5-6, 21-23, 94-96, 101-103 and 112-113, Berrang discloses the claimed invention as described in detail above, except for the elongated flanges that hold the disposed protuberances at opposing angles. Håkansson teaches that it is known to use flanges and anchoring devices that are disposed at an opposing angle that is approximately 85 degrees and in the same plane as set forth in Figures 1 and 2

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to provide anchoring means for the implantable device. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the hearing aid as taught by Berrang, with flanges and multiple anchors disposed in the flanges at opposing angles as taught by Håkansson, since such a modification would provide the predictable results of a hearing aid with strong anchoring means for providing increased hold and more surface area for osseointegration.

### ***Conclusion***

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Berrang et al. (U.S. Pat. 6,516,228), De Rowe (U.S. Pat. 6,042,380), Dugot (U.S. Pat. 5,738,521), Gilman (U.S. Pat. 5,176,620), Jeffcoat et al. (4,333,469) – All discuss the bone growth properties of titanium.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rex Holmes whose telephone number is 571-272-8827. The examiner can normally be reached on M-F 8:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on 571-272-4955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Rex Holmes  
Examiner  
Art Unit 3762



GEORGE R. EVANISKO  
PRIMARY EXAMINER

9/29/17